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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/993,961	11/27/2001	Karel van den Berg	8553/114a	9011

7590 10/16/2006

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EXAMINER

CHAUDHRY, SAEED T

ART UNIT PAPER NUMBER

1746

DATE MAILED: 10/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/993,961	Applicant(s) BERG, KAREL VAN DEN	
	Examiner Saeed T. Chaudhry	Art Unit 1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 35-38 and 55-64 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 35-38 is/are allowed.
- 6) ☒ Claim(s) 55-64 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1746

DETAILED ACTION

Applicant's amendments and remarks filed November 17, 2005 have been acknowledged by the examiner and entered. Claims 1-34 and 39-54 have been canceled and claims 35-38 and 55-64 are pending in this application for consideration.

Terminal disclaimer filed July 6, 2004 has been accepted and claims 35-44 rejected under obviousness-type double patenting has been withdrawn in view of the terminal disclaimer.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 55-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hei et al in view of Branton and Pera.

Hei et al (5,567,444) disclose a method of cleaning and sanitizing process facilities such as milk line dairy by circulating an aqueous sanitizing composition comprising an effective amount of hydrogen peroxide and acetic acid. The reference discloses that it is common to

Art Unit: 1746

prepare, in-situ, and employ peracid sanitizers with hydrogen peroxide (see claim 25 and col. 24, lines 41-44). The composition of the invention can be formulated by merely mixing acetic acid, hydrogen peroxide and fatty acids. By allowing solution time for equilibrium to be obtained, the product containing both of the active biocides is obtained (see col. 12, lines 45-50). The peracid components used in the composition of the invention can be produces in a simple manner by mixing a hydrogen peroxide solution with the desired amount of acid. The hydrogen peroxide solution can be added to peracid such as peracetic acid to produce the peracid composition. The concentrate can contain about 1 to 70%, preferably 5 to 30 wt-% of hydrogen peroxide. Hei et al disclose all the limitations as claimed herein. One preferred application of the materials of the invention relates to dairy processing equipment. Such equipment are commonly made from glass or stainless steel. Such equipment can be found both in dairy farm installations and in dairy plant installations for the processing of milk, cheese, ice cream or other dairy products.

The material can be sprayed onto the surface, surfaces can be dipped into the aqueous material, the aqueous cleaning material can be used in automatic warewashing machines or other batch-type processing (see col. 7, lines 8-25). The reference fails to specify an automated method of cleaning a milk line system.

Branton (3,916,923) discloses a method and an apparatus for washing milking system. The present invention is directed to an apparatus for automatically washing and sanitizing a pipeline milking system. After the milking has been completed, the wash cycle is initiated and the apparatus automatically programs a first rinse cycle, a wash cycle and a second rinse cycle with detergent and acid being automatically added to the water during the wash and second rinse cycles, respectively, to completely clean the pipeline and the other attached milking

Art Unit: 1746

components. A predetermine criteria such as 24 hour timer which is programmed to start a sanitizing operation at a preset time (see col. 1, lines 20-32).

Pera (5,415,192) discloses milking robots, which make is possible to milk continuously, the cleaning process must be carried out automatically. Since in automatic control of the milking robots a control device is already present for automatic control of the milking process, there is need for cleaning device which operates fully automatically (see col. 1, lines 43-49).

It would have been obvious at the time applicant invented the claimed process to utilize a method of automatically cleaning the milk line system of Branton and Pera into the process of Hei et al. The artisan would have been motivated to make the instant combination in an attempt to automate the cleaning process and reduce human errors. Further, the claimed process uses language which does not exclude any other steps or chemicals. Furthermore, hydrogen peroxide is well known chemical for sanitizing the soil surfaces as disclosed by Hei et al. Therefore, one of ordinary skill in the art would use hydrogen peroxide for sanitizing and cleaning milking system.

Claim 58 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hei et al in view of Branton and Pera as applied to claim 57 above, and further in view of Bowing et al.

Hei et al, Branton and Pera were discussed supra. However, the references fail to disclose peracetic acid in the range of five to fifteen percent by weight.

Bowing et al (4,051,059) disclose a composition to prevent the growth of germs on machines particularly food industries and killing microorganism comprising 0.5% to 20 % peracetic acid, 25 to 40 % hydrogen peroxide and remainder to 100% by weight water (see col. 3, lines 5-8, col. 4, line 1 and claims).

It would have been obvious at the time applicant invented the claimed process to utilize composition as disclosed by Bowing et al and manipulate the percentage of the peracetic acid in the process of Hei et al to enhance the cleaning efficiency and prevent the growth of the germs in the milk line system.

Claims 59-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hei et al in view of Branton, Pera and DE-342711.

Hei et al., Branton and Pera were discussed supra. However, the references fail to use electrical conductivity measurement of cleaning solution.

DE-3424711 discloses a method of determining the cleanliness of food manufacturing machinery wherein the cleaning fluid is applied to the parts of the system without dismantling, which uses a pair of measured values to show the electrical conductivity of the cleaning fluid before and after application. During the cleaning phase, the separate values are compared with each other. The cleaning phase is ended when the difference between the separate and simultaneous values has dropped to preset minimum level. The reference fails to use hydrogen peroxide as a cleaning solution and the milk line are automatically cleaned.

It would have been obvious at the time applicant invented the claimed process to automatically clean the milking system as disclosed by Branton and measure the electric conductivity of cleaning solution as disclosed by DE-3424711 into the process of Hei et al to control the duration of cleaning phase and to reduce the energy consumption by the cleaning process. Further, one of ordinary skill in the art would measure the conductivity of the cleaning solution where it is most susceptible to contamination such as line interconnected with teat cups to enhance the cleaning efficiency. Furthermore, one of ordinary skill in the art would manipulate the percentage of the hydrogen peroxide for better cleaning and sanitizing the equipment.

Allowable Subject Matter

Claims 35-38 are allowed over the cited prior art.

Reasons For Allowable Subject Matter

The following is an Examiner's statement of reasons for the indication of allowable subject matter:

None of the prior art discloses or suggests a method wherein electrical current between a pair of electrodes determine the wholesomeness of milk or the fluid hydrogen peroxide. The closest cited prior art DE-3424711 disclose to compare electrical conductivity of the cleaning solution but fails to measure the conductivity of the milk to determine the wholesomeness of the milk.

Applicant's arguments with respect to claims November 17, 2005 have been considered but are deemed to be moot in view of the new grounds of rejection.

Applicant's amendment necessitated the new grounds of rejection. Accordingly, THIS ACTION IS MADE FINAL. See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saeed T. Chaudhry whose telephone number is (571) 272-1298. The examiner can normally be reached on Monday-Friday from 9:30 A.M. to 4:00 P.M.

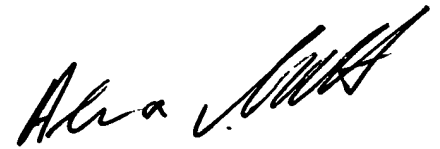
Art Unit: 1746

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Michael Barr, can be reached on (571)-272-1414. The fax phone number for non-final is (703)-872-9306.

When filing a FAX in Gp 1700, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communication with the PTO that are for entry into the file of the application. This will expedite processing of your papers.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-1700.

Saeed T. Chaudhry
Patent Examiner

A handwritten signature in black ink, appearing to read 'Alex Markoff', with a stylized flourish at the end.

ALEXANDER MARKOFF
PRIMARY EXAMINER